DOCUMENT RESUME

ED 201 052 EA 013 503

AUTHOR	Bossert, Steven T.; Barnett, Bruce G.
TITLE	Grouping for Instruction. A Catalog of Arrangements.
INSTITUTION	Far West Lab. for Educational Research and Development, San Francisco, Calif.
PUB DATE	Jan 81
NOTE	36p.
AVAILABLE FROM	Class Size and Instruction Program, Far West Laboratory for Educational Research and Development, 1855 Folsom St., San Francisco, CA 94103 ($2.00).
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Cross Age Teaching; Elementary Secondary Education; Flexible Scheduling; *Grouping (Instructional Purposes); Learning Centers (Classroom); Parent Teacher Cooperation; Peer Teaching; Physical Development; School Surveys; *Small Group Instruction; Teacher Aides; Team Teaching; Tutorial Programs
IDENTIFIERS	California (North); Nevada; Utah

ABSTRACT

Intended for educators who wish to work with small groups of students from larger classes, this catalog describes seven common instructional grouping arrangements, and four associated concerns, revealed by a 1979-1980 survey of teachers and programs in Nevada, Utah, and northern California. The instructional grouping arrangements include (1) cross-age and peer tutoring, (2) developmental programs, based on primary school children's physical development, (3) learning centers within classrooms, (4) pull-out programs for students to work outside the classroom, (5) staggered or split scheduling, (6) subject matter grouping, and (7) team teaching. For each grouping arrangement, the catalog gives a brief definition, discusses the grouping's goals, structure, coordination and support, advantages, and problems, and lists the survey respondents using it. The four concerns noted by the catalog are the use of aides, time for teacher coordination, communication with parents, and scheduling of teachers and students. The catalog offers successful strategies for handling each concern and mentions the programs that developed them. An index of all survey respondents, with addresses and telephone numbers, allows catalog users to contact programs directly for answers to questions. (RW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED201052

GROUPING FOR INSTRUCTION

A Catalog of Arrangements

by

Steven T. Bossert

Bruce G. Barnett

January, 1981

EA 013 503

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

A. H. Scrancato

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ACKNOWLEDGEMENTS

I must thank the many people who participated in this regional survey of instructional grouping arrangements. Despite busy schedules, teachers, principals and other educators freely gave of their time to describe their programs and provide us with further contacts. Moreover, their collaboration in this effort will not end when this report is published if you, the reader, will call them and seek their advice in developing or improving your own grouping practices. Their insights have been invaluable to our project, and I hope they are for you.

Our staff deserves much credit as well. Glen Harvey capably handled most of the interviewing and initial preparation of materials. Bruce Barnett, Ginny Lee, and Janice Schafer took over the task of summarizing the vast quantities of information and of visiting selected schools; they did an excellent job. Kris Montague and Sharon Hansen ably assisted with the preparation of this report.

Steven T. Bossert
Senior Research Director
Programs on Schooling

FEB 16 1981

TABLE OF CONTENTS

Acknowledgements i

Introduction 1

Common Instructional Grouping Arrangements

Cross-Age and Peer Tutoring 4

Developmental Programs. 6

Learning Centers. 8

Pull-Out Programs 11

Staggered or Split Scheduling 13

Subject Matter Grouping 15

Team Teaching 18

Concerns and Possible Strategies

Concern: The use of aides. 21

Concern: Time with other teachers. 23

Concern: Informing and involving parents 23

Concern: Assigning students and teachers 24

Respondents. 27

INTRODUCTION

Many educators are concerned with reducing the number of students in elementary, junior high, and secondary classrooms. In support of this, several projects within the Class Size and Instruction Program at Far West Laboratory have been exploring the effects of reduced class size on students and teachers. Our work suggests that under certain conditions smaller classes are better. For example, one analysis concluded that classes must be reduced below twenty students before measurable effects are realized by students and teachers.

This research on class size coupled with the fact that most school districts face economic hardships has led our staff to conclude that substantial reductions in class size are probably not feasible. We also believe that teachers can, and do, use instructional grouping arrangements that allow them to work with fewer numbers of students for at least part of the school day, thus obtaining the benefits of smaller groups. We have sought to discover more about these grouping arrangements by conducting a survey of teachers and principals in our region.

Regional Survey

In order to learn more about the procedures teachers and school administrators use to establish and effectively operate instructional groups within the classroom and the school, we conducted a regional telephone survey during the 1979-1980 academic school year. A list of teachers and principals in our region of Northern California, Nevada, and Utah who had developed and/or were using creative instructional grouping arrangements was generated from existing contacts we had with teachers, teachers' organizations, principals, curriculum coordinators at the state and local levels, professors of education, and other educators. Once identified, these teachers and principals were contacted; rather than asking them to respond to a fixed series of questions, we asked them to describe the most important features of their programs. In several cases, a program was considered so unusual or complex that a site visit was arranged and the program was observed in operation.

As we conducted the regional survey, some common themes and concerns became apparent. This catalog then, is an abstract of these common issues as expressed by teachers, principals, and other school personnel. From the information we obtained, only general descriptions of instructional grouping arrangements and programs were possible. However, individual respondents and their programs are identified throughout so that teachers and principals may contact them for more specific information about their instructional grouping practices.

ORGANIZATION OF THE CATALOG

The catalog has been separated into three sections which include: (1) a description of the most common instructional grouping arrangements, (2) a description of some major concerns of those using instructional groups and possible ways to address these concerns, and (3) an index of survey respondents.

(1) Common Instructional Grouping Arrangments

This section contains descriptions of the seven most commonly mentioned instructional grouping arrangements. Although many teachers use these arrangements in combinations, each one is described separately here in order to highlight its essential features. Each arrangement includes the following information:

1. Definition
2. Goals
3. Overview (including structure, coordination and support)
4. Advantages
5. Problems
6. Programs Contacted

This information may not be novel to many experienced teachers and administrators; however, it can begin to show them various alternatives to the arrangements they are now using. New teachers who are considering the use of a particular arrangement should find these descriptions helpful in making critical comparisons between arrangements as well as identifying the promises and problems of any one arrangement.

(2) Concerns and Possible Strategies

The second section points out some of the more common concerns teachers and principals have when setting up or using any of the arrangements mentioned in the first section. Various ways that different teachers and schools have dealt with these concerns are described. These concerns center around four major themes which include:

1. Aides, tutors, volunteers - their use in the classroom, especially in relation to training, assignment, and planning time.
2. Teacher coordination - finding time for teachers to get together to discuss their programs, students, and activities.
3. Communication with parents - providing parents with information about programs and getting them involved in the programs.
4. Scheduling - assigning students and teachers to groups.

Providing the information of how others have attempted to cope with these issues is meant to alert principals and teachers to the various alternatives open to them during the planning and implementation of their own programs.

(3) Index of Survey Respondents

The last section identifies the different teachers, principals, and other school personnel who participated in the survey. This section is divided into two parts. The first part lists those respondents who provided specific information contained in the first two sections of the catalog. Code numbers for each respondent are represented in the left margin followed by their complete address and phone number. Respondents are arranged numerically by state with respondents from each state being identified with a different code letter. California respondents are identified with a C, Nevada respondents with an N, and Utah respondents with a U. For example, C5 would represent respondent number 5 from California. These same code numbers are cited throughout the

catalog so readers can quickly identify which respondents are using which arrangements as well as where we obtained our examples of how programs operate.

The second part of the index recognizes some additional survey respondents. Although these people were not able to provide us with direct information about particular arrangements, they were helpful in supplying us with the names of other contacts.

USE OF THE CATALOG

The catalog is intended to illustrate the variety of ways students may be grouped for instruction, the concerns teachers and administrators have when grouping students, and the ways certain survey respondents have dealt with these concerns. Because the regional survey did not attempt to evaluate any of the programs described, our intent has not been to provide rules for establishing instructional grouping arrangements in any school or classroom. Moreover, it is clear from the interviews and site visits that different practices may be used to solve similar instructional problems. The desirability and effectiveness of any particular practice will vary from school to school, and even from classroom to classroom.

Realizing that those who read and use this catalog will have varying needs and circumstances, we believe different parts of the catalog may be more informative than others in addressing their current questions and concerns about reduction of instructional group size. Rather than reading this catalog from cover to cover, we suggest picking and choosing from those sections which seem most relevant to each person.

Much of the information about particular programs is rather general, so we urge readers to contact those respondents listed in the index for answers to their specific questions. We have purposely identified which respondents have provided us with specific information in each section so that if readers should become interested in a particular idea, they may directly contact the person using that program. In this way we hope to provide teachers and principals with some general information as well as a network of resource persons who can help them improve their instructional programs. Finally, we would encourage those who have copies of this catalog to pass it along to other teachers, principals, and additional school personnel who might be interested in its contents.

CROSS-AGE AND PEER TUTORING

DEFINITION

Cross-age and peer tutoring involves students of the same or different age serving as tutors for other students.

GOALS

The major goal of cross-age and peer tutoring is to provide individual help to tutees and thus allow teachers more time to work with individuals or small groups of students. Tutoring often allows a reduction in class size which is of benefit to the remaining students as well. Teachers also feel that the reinforcement of academic concepts and the enhancement of social skills are additional outcomes for students involved in peer tutoring.

OVERVIEW

Structure. Cross-age and peer tutors are usually students who have shown a high ability in a particular subject area. Tutors may remain in the classroom but occasionally use a different room or area when tutoring. Heterogeneous groupings and cross-age combination classes are also found to be well suited to this type of tutoring since students of different abilities or ages are grouped in one classroom. For example, one teacher uses a system where each student works with a partner (N5). Initially, partners are assigned by the teacher, and every six weeks they are changed by student choice. Partners may be of the same or different ability.

Other instructors find it useful to have older students tutor in their classrooms. Most often they are sixth-, seventh-, or eighth-graders, but occasionally programs have the opportunity of using student tutors from neighboring junior and senior high schools (C1, C24, C28).

The tasks assigned to tutors are varied. Often they are asked to reinforce specific skills and concepts taught in the classroom, explain directions, or supervise play. This is particularly true when students are about the same age. In addition to these tasks, the older tutors listen to children read, take them to the library, or do paperwork for the teacher. In nearly every case the tutor is directly supervised by the teacher for academic tutoring.

In general, it appears that most teachers do not offer material incentives to their tutors or students, but feel that the student is self-enticed to do better work with a peer. One principal feels that the tutor's ego is greatly boosted, which is a type of self-incentive (N10). None of the teachers interviewed stated any incentive for themselves in starting up programs, although one principal did mention that allocating travel money to teachers for visits to other school sites initiated positive changes and enthusiasm (U7).

The majority of programs use tutoring for reinforcing academic skills, and in general there are no tests in the tutored groups. Some teachers keep

careful track of what goes on in their tutors' groups and spend a certain amount of time conferring with them. Others utilize groups as practice sessions and delegate much of the responsibility to the aide, although of course the teacher remains responsible for designing the lesson plans for academic groups.

Coordination and support. Training aides and volunteers as well as student tutors is normally the responsibility of the teacher. In most instances, aides and tutors take responsiblity for their own groups, although teachers usually have to monitor all groups at once. Time must also be set aside for the teacher and tutor to meet and discuss observations and lesson plans.

Title I and School Improvement Program (SIP, California elementary schools only) funds are commonly used by schools that have tutoring programs. One program qualified for Title VII--Bilingual (C24). These funds are used to hire aides and purchase books and materials. In some cases, teachers develop their own classroom resources.

ADVANTAGES

The biggest advantage of tutoring programs is the reinforcement of academic skills and concepts by both student and tutor. This method of learning also enhances social interaction and encourages the cooperation of students among themselves. Teachers also report that using tutors results in a reduction of class size which allows more individualized instruction.

PROBLEMS

The complaint heard most often concerns the lack of time: time for training of aides and tutors, scheduling of groups, meeting with tutors, and class preparation. One tutoring program partially solved the problem by institutionalizing two weeks of training (N16).

The second most common problem appears to be student discipline and distraction. A few principals noticed that when older students tutored younger children, they both became more self-controlled (C28, U7). Another teacher solved the problem by splitting the class into teams which were responsible for maintaining their own discipline (C5). The students also had self-imposed fines for breaking rules.

PROGRAMS CONTACTED

C1, C2, C5, C7, C10, C12, C24, C28, C30, C33, C35, C38.
N1, N3, N5, N10, N12, N16, N21.
U7, U24, U35.

DEVELOPMENTAL PROGRAMS

DEFINITION

Some kindergarten and first grade classes have designed programs that group children on the basis of physical development, particularly their small muscle control and attention span.

GOALS

The main purpose of developmental programs is to prevent students from failing and to provide them with additional time to develop. Teachers feel that the early intervention of such programs help children establish individuality and a good self-concept. In addition, allowing children more time to develop necessary skills may help them function normally in school as they grow older. In one case, many developmental students now in fourth and fifth grade have been mainstreamed into regular classrooms (N13).

OVERVIEW

Structure. There are three types of developmental programs described: a developmental kindergarten, a pre-first program, and a developmental first grade.

The developmental kindergarten at Alisal Elementary School in Pleasanton, California (C1), assigns children to three different classes according to their small muscle control development and attention span. They are divided into young, middle, and older groups based on tests which all children take when registering for kindergarten. The program is academically the same for all three classes, but the form is altered to fit each level of development. In this particular kindergarten, the average number of students is thirty with one teacher, one part-time aide, and occasional tutors. Normally, the aide and teacher work together with all of the students. Children are not grouped differentially within the classroom, but tutors may take small groups out of the classroom.

The pre-first program at Alisal School (C1) is for children who have completed kindergarten but are not developmentally ready for first grade. Like the kindergarten group, this is only for the developmentally immature, and not for children with learning problems. A student must be of average or above average intelligence. In this program students are recommended by their kindergarten teacher, and they must also have their parents' approval to be placed in the program. Teachers estimate the class size to be between 23-24 students made up of about one-half of the youngest kindergarten group plus students from other schools.

The developmental first grade programs at Gleason Elementary School and Mildred Bray Elementary School in Carson City, Nevada (N13, N15), allow children two years to complete first grade with the same teacher. They are not for children with learning problems. Children are tested by the district staff for placement and they must have parental approval to be enrolled in the class.

In these two programs, the number of students is limited. Children in each program are then divided into four groups and they rotate to their various activities, as does a full-time aide. Groups center around reading or math with the teacher, individual seatwork, and learning centers supervised by the aide. Groups are determined by need, ability, and learning style.

Coordination and support. Children have one teacher for the year or two they are in a developmental class. Therefore, coordination usually involves only the teacher and an aide. The developmental kindergarten has a CETA aide and utilizes high school volunteers as tutors (C1).

Principals and school board members are generally supportive of the programs as long as there are enough funds. The need for resources are not specifically stated in the interviews, but respondents mention that programs could qualify for an aide or extra funds, usually Title I or the School Improvement Program (SIP, California elementary schools only). Parents are supportive too, although initially in the pre-first program a fair amount of public relations work was necessary to convince parents that being recommended for the program did not mean their child was failing (C1). The program has since generated its own enthusiasm and parents outside of the attendance area often request to enroll their children in the program.

ADVANTAGES

Teachers find that grouping developmentally helps children feel more secure by allowing extra time for maturation. The developmental first program in particular offers the security of having the same teacher and familiar friends for two years (N13, N15). This also gives a greater teaching flexibility because subject matter can be taught over a period of two years. While these programs are not designed primarily to reduce class size, they usually do by limiting the class to between 22-29 students.

PROBLEMS

The major difficulty with developmental programs is cost. In the pre-first and developmental first grade programs an extra year of school is needed. This requires not only more staff, but more classroom space and curricular materials, all of which require additional money.

Another problem involves parent attitudes. Teachers need to spend time explaining that these programs are not for children with learning disabilities or behavior problems. Regular school staff must also be educated to the philosophy of the programs as well.

Lastly, there is the recurrent problem of finding extra time to train and supervise aides and tutors.

PROGRAMS CONTACTED

C1.
N13, N15.

LEARNING CENTERS

DESCRIPTION

Learning centers are usually set up as separate areas of the classroom or school where students are involved with different skills, disciplines, themes, and activities.

GOALS

The primary purpose of learning centers is to enable teachers to work with smaller groups of students. Teachers feel that reducing their instructional group size gives students more time to practice basic skills learned in the classroom. Instructors also use learning centers to encourage student independence and responsibility.

OVERVIEW

Structure. Learning centers can be set up in any situation from the single, closed classroom to schoolwide systems. The most common examples by far in this survey are the team teaching units.

Students are generally assigned to centers randomly, although many teachers group students in reading and math centers according to ability or need. The number of centers depends upon the number of students and teachers involved. On the average, individual teachers use five centers and depend heavily on aides, tutors, and parent volunteers to supervise the centers. From three to ten centers are used when teachers team together and they are most often set up in two rooms or one large open classroom.

Classroom space is also a consideration in setting up learning centers. A schoolwide program utilizes extra space in the school resulting from a declining enrollment (C43). These centers are established independent of any one particular classroom or grade, and the activities are designed around the application of basic skills. The centers are staffed by resource teachers and aides, and students are cross-grade grouped.

In all cases, students rotate from center to center while teachers are stationary. Students in the single classroom usually use all centers each day. Students in a team teaching situation may use from three or four per day to only one per week, although the average appears to be one center per day. The number of centers established varies depending upon the interest or need. While some teachers have a set number of centers and change the activities when all students have rotated through, others start with a smaller number and add centers as an interest or need develops. One particular kindergarten has centers that revolve around a different theme each week (U2).

Most teachers using learning centers use them as their primary method of instruction and develop centers that relate to a particular subject. Other teachers use them as supplements to the regular academic program. For example, one kindergarten teacher has developed a system using six centers: art, free

play, tactile (sand table, puppets, etc.), reading and math, review table, and instructional center (N12). The first five centers are not specifically related to the instructional center but are used rather as supplements.

Most students are assigned to centers by their teachers; however, students may be allowed to pick and choose among a variety of activities within the center. A few programs allow students to choose their own centers, although there are certain rules to be followed. Teachers often assign a group of students to a certain center because the subject matter further reinforces previous instruction. These can be either homogeneous or heterogeneous groups. Some teachers find that heterogeneous grouping allows the high-ability students to help the low-ability students. This encourages social interaction and cooperation among the students as well as relieving the teacher of some of the teaching burden.

For the most part, teachers are responsible for designing and setting up learning centers. They are usually also responsible for monitoring all students in the centers, with help from aides and volunteers.

Student evaluation depends on whether the centers are considered supplementary to the academic program or not. Many teachers consider centers to be practice sessions and do not directly grade the work completed. A great deal of center work appears to be designed to be self-correcting, although some teachers like to assign a certain amount of work to be turned in and graded as any other class work. The schoolwide program has children report their two activity choices to an aide at the beginning of an 80-minute period (C43). At the close of the period students return to the aide to evaluate themselves.

Coordination and support. Coordinating teachers, aides, and parents, and scheduling students is often a difficult juggling act. Most teachers stated that once centers are established, they are relatively easy to maintain, but that a good deal of time is still required for meeting, planning, scheduling, and regrouping. Initially, students moving around from center to center can be noisy and distracting; most teachers feel this gradually diminishes as routines become familiar.

The need for special resources was mentioned by only a few respondents. The schoolwide system is funded through the School Improvement Program (SIP, California elementary schools only) and has two resource teachers and seven aides (C43). Title I resources also are mentioned a few times, but in general, programs seem to rely heavily on student tutors and parent volunteers. A few programs have student teachers and some mentioned having adult clerical help, although that was usually limited to a few hours per week.

ADVANTAGES

The advantage most often cited by teachers is the reduced instructional group size which allows them to work with smaller numbers of students. This is felt to increase student-teacher interaction and to encourage social interaction among the students as well. For instance, smaller groups benefit from more teacher attention; the other groups benefit by learning to work on their own or with each other. Some teachers like learning centers because they provide students with a wider variety of activities and options.

PROBLEMS

The major difficulty felt by most teachers is the initial set-up of the centers. A great deal of time is required to plan and gather materials. Additional money may also be needed. Teachers commented however, that once this initial organization is completed, center use runs smoothly for both teachers and students.

A somewhat lesser problem involves scheduling students. Assigning them to centers is much more time-consuming than letting them choose on their own, but when students choose, this often makes monitoring and evaluation more difficult.

PROGRAMS CONTACTED

C6, C36, C42. C43.
N1, N12, N20.
U2, U3, U9, U10, U24, U28, U34.

PULL-OUT PROGRAMS

DESCRIPTION

In pull-out programs students are pulled from their regular classrooms to work with resource teachers or specialists, or to work independently in special resource centers and classrooms. These programs provide an individual child or small group of children with more concentrated attention.

GOALS

The primary goal of pull-out programs is to help students having academic difficulty in the regular classroom. Teachers feel that individualized instruction can help students be mainstreamed back into a regular class program. Most instructors reported pull-out programs to be successful in achieving their aims.

OVERVIEW

Structure. Students are normally referred to these special programs by teachers, by specialists or counselors, and occasionally by parents and/or students themselves. Testing is usually required to determine eligibility; parental consent is also often required before a student can join a program.

The size of pull-out programs is usually limited to allow students more time with a teacher or an aide. Work is generally conducted in small groups of three to ten students, or by individual instruction. There are a few instances of large group instruction, usually in junior and senior high school programs. Although there may be twenty students pulled out in a large group, each student's program is highly individualized and the system allows the students to work independently (N17, N18).

In most cases, the resource teacher or aide is responsible for planning the program lesson. Many teachers confer with the resource person to correlate the program lessons with regular classroom subjects. For instance, one ESL student was pulled out for extra reading and vocabulary during the class period of creative writing (C38). She was gradually mainstreamed back into the class when she improved her English skills enough to participate in creative writing. Other teachers do not want students pulled out during a related class period, but would rather have them pulled at such times as library or study hall periods, or during other classes that are easily made up. Most teachers who use this option warn against the possibility that being pulled out during "fun" times can be viewed as punishment by the student. In addition, most teachers believe that such subjects as art, music, and P.E. should not always be sacrificed to the pull-out program. When students are pulled from a nonrelated class they are usually required to make up that work.

For the most part, programs emphasize academic skills such as reading and math. Many include students with learning disabilities and one program includes handicapped students (N3). This particular school also has a program

for gifted children that offers more challenging and stimulating work. These are generally academically oriented as well.

The amount of time spent in the program varies according to student need, but the average appears to be thirty minutes to an hour. The frequency of attending ranges anywhere from one day per week to five days per week. A few programs have centers where students spend one or more days per week. In one center the student is completely removed from the mainstream until he/she is caught up (N17).

Evaluation is not directly referred to except in terms of results. Teachers talk about students improving their skill levels, but not specifically how that is determined, although some mention students having higher reading scores because of pull-out programs.

Coordination and support. Many programs have resource teachers, aides, and other education specialists funded by the School Improvement Program (SIP, California elementary schools only) or Title I. This requires a certain amount of time for conferring and scheduling. Most teachers indicated a need for an average of two hours per week for coordination, which is usually done before and after school or during weekly scheduled meetings. In one particular case, one day each month is set aside for teacher coordination (C37).

ADVANTAGES

Most teachers feel that pull-out programs are a great advantage for students who need extra academic help. The advantage lies not only with the pull-out student who receives more attention, but also with the remaining students who may benefit from a reduced instructional group. Others feel that program students also advance on an emotional and social level because of their academic success. Sometimes class size is reduced substantially enough to be of benefit to the instructor.

PROBLEMS

The biggest complaint with pull-out programs seems to be the problem of scheduling time appropriate for the student and convenient for the resource teacher. The regular teacher usually determines the best time for pulling a child and the pull-out teacher tries to accommodate this preference. This is often a problem either because too many teachers request the same time period, or the resource person is shared among schools and is only available at particular times of the day. For those teachers who feel make-up work is needed, an extra amount of time must be set aside to confer with program students.

PROGRAMS CONTACTED

C7, C15, C18, C19, C22, C27, C31, C34, C37, C38, C40, C41, C43.
N1, N2, N3, N7, N8, N11, N17, N18, N19.
U5, U6, U8, U9, U11, U18, U20, U22, U24, U26, U33.

STAGGERED OR SPLIT SCHEDULING

DEFINITION

Typically, part of the class (or school) follows the regular school schedule while the remainder of students arrive later in the morning and hence stay later in the afternoon.

GOALS

The primary reason for setting up a staggered or split schedule is to reduce the student-teacher ratio for part of the school day. In this way, teachers can work with smaller numbers of students in particular subject matter areas which in turn can reduce classroom management problems. In addition, teachers also feel staggered scheduling is useful for improving the skill level of their students. Some teachers feel that it provides an opportunity to involve parents in the instructional process as volunteer aides.

OVERVIEW

Structure. If the regular school schedule is 8:30-2:00, one portion of the class will follow this schedule while the remainder will follow an alternative schedule, such as 9:30-3:00. Occasionally, cross-age combination classes operate under a different approach. For example, one kindergarten first grade combination has the kindergarteners attend school from 8:30-11:00 while the first graders are at school from 9:30-3:00 (C24). Clearly, such an arrangement is only possible when the combination involves kindergarteners who usually spend a shorter amount of time in school than other students.

Staggered schedules are commonly used to teach reading. Students are usually grouped into homogeneous morning and afternoon ability groups with some chance for students to move between groups. In general, the low ability readers come to the morning reading session and high-ability readers stay for the afternoon reading session. The thinking behind this arrangement is that low ability students are more alert at the beginning of the day while high ability students are more motivated and are able to concentrate later in the school day.

This morning-afternoon division of students is not always based on ability alone. For instance, one school using a staggered schedule for reading has approximately 60% of their students in the early session and 40% in the late session (U16). This 60-40 split is set up because more aides can come in the morning and many students cannot stay later since they are bussed to school. Parents also have some say in the schedule since they often request that all their children be placed in the same session.

Teachers generally tend to further split their early and late sessions into at least two homogeneous ability groups. Some even report using up to six groups at a time, perhaps in an effort to meet the needs of many non-English speaking and minority students. These groups tend to be as small as 5-7 students and as large as 12-15 students. This subgrouping forces teachers to monitor several groups at once; however, many of them have either paid aides or parent volunteers who help manage these multiple groups. One teacher even mentioned that she uses a high school tutor (C36) while another group of teachers uses student interns and student teachers from a local university (U16).

Coordination and support. Teachers must fit planning time into their schedules to coordinate with their paid aides and volunteers. Some teachers plan their activities with other staff on a daily basis, such as during lunch time, while others reserve one afternoon per week for this task. One program has a weekly inservice meeting for all of their aides (U16).

For the most part, teachers are responsible for planning the activities, although one program uses a coordinator who oversees the weekly assignment of students and teachers to various skill groups (U16).

District level personnel, as well as school principals, have also supported teachers using a staggered schedule. Many times these people have supported programs by allowing district money to pay aides and by providing them with periodic inservice, as well as encouraging the use of parental volunteers.

Both money and additional instructional staff are the two most important resources used in staggered scheduling. In general, the available finances are used for paying aides for classroom instruction or supplying inservice training. This money comes from a variety of sources, most notably Title I, the School Improvement Program (SIP, California elementary schools only), and district funds.

ADVANTAGES

Teachers appear to view staggered scheduling as a way of helping them manage learners and learning, especially in reading instruction. Since they are dealing with smaller numbers of students for a portion of the school day, some teachers believe this allows them to increase the amount of interaction they have with each student.

PROBLEMS

Administrators often complain that the task of scheduling large numbers of students into a staggered schedule can be cumbersome. Many parents, especially working parents with several school-age children, rely on having their children attend the same morning or afternoon session which is sometimes difficult to arrange.

For teachers, the major difficulty is the extra time required at school (usually one-half hour per day) along with the additional planning time for coordination with aides and/or volunteers. One teacher mentioned she spends 45-55 hours per week teaching and coordinating her program (C36). Another problem is the difficulty of having the late group of students arrive before their scheduled time. In an effort to keep these early arrivals from disrupting other classes many teachers are forced to create activities for them. Unfortunately, this begins to defeat the purpose of staggered schedules, namely allowing teachers to work with smaller numbers of students.

PROGRAMS CONTACTED

C3, C6, C8, C13, C14, C19, C20, C21, C23, C24, C25, C35, C36, C38, C39, C45. U16, U23.

SUBJECT MATTER GROUPING

DEFINITION

Subject matter grouping is probably the most common instructional arrangement used by teachers. Students are placed in small groups according to the subject being taught.

GOALS

The purpose of smaller groups is to allow teachers to monitor more closely the individual work of their students and to provide curriculum materials to match their ability level. Teachers believe students are less frustrated when they have appropriate materials and direct assistance from the teacher. Small groups also serve the purpose of increasing student learning.

OVERVIEW

Structure. Subject matter grouping is used mostly by elementary teachers during reading, spelling, and math instruction, and the groups commonly consist of children who have similar abilities. First-of-the-year testing in basic skills often serves as the basis for forming groups, though some teachers use their own assessment techniques while others rely on district-wide testing results. When heterogeneous ability groupings are used, teachers generally form groups on the basis of other factors, such as the children's learning styles or their level of behavior/social adjustment.

Three subgroups within a classroom is the most common arrangement, though a few teachers report using as many as five ability groups in a single subject (U16). Sometimes groups are formed from two or more classrooms when teachers team and can involve cross-age groupings. However, individual teachers also use subject matter groupings within a self-contained classroom setting.

Teaching techniques associated with subject matter grouping vary substantially from teacher to teacher in the survey. It is common for a teacher to work with one group--often in direct instruction--while other groups work on assignments. The teacher rotates from group to group. When an aide is present, he/she might monitor other groups (answering questions) or may work with one group in direct instruction. The main prerequisite for subject matter grouping is having curriculum materials that can be used with different ability groups. This is done either by making different assignments within a common basal text or by using different materials for each group.

Although most teachers report that they gather and adapt their own materials to meet the needs of the groupings in their classes, some schools and districts coordinate the production and distribution of curriculum packages. One district, for example, maintains a central bank of materials that have different ability level items for each skill area identified in the district's reading and math program (U14). Teachers (and even parent aides) can reproduce a master copy from this skills bank.

Few teachers report that they have regular mechanisms for assessing the appropriateness of their groupings, although all teachers indicated their groups are not static. Notable exceptions to this are those programs that rely on criterion-referenced tests to form and assess grouping practices (N6, U16). For example, one program changes groups weekly based on the skill items taught and learned during the previous week (U16). This program not only groups children who need instruction on a specific skill but also matches teachers who have particular expertise in teaching a skill with the appropriate skill group.

Coordination and support. Because subject matter grouping can be used by a single teacher or by groups of teachers sharing pupils, the degree of coordination depends on the extensiveness of collaboration. When coordination among teachers is required as a result of regrouping pupils across "homeroom" classes, most teachers expressed a need for planning time. Often this is accomplished during weekly planning/assessment meetings where teachers who share children organize their schedules and discuss the problems and successes of particular students, regrouping when necessary. Many schools in which subject matter grouping is reported also have "early dismissal" days (usually once a week) to allow for teacher planning. When teachers use common assessment techniques (like criterion-referenced tests) and similar curriculum materials, they report that planning and coordination are relatively easy tasks.

When aides are used in instruction, teachers note that training is the most important aspect of coordination, and most teachers report that they prefer to plan their curriculum with the aides so that an understanding of the concepts and techniques will be clear. Programs that use a common basal curriculum and those that employ skills-based materials seem to report less coordination problems with aides because materials and teaching techniques have already been organized in advance of classroom instruction.

The nature of special resources depends on the complexity of the grouping arrangements. For the single classroom teacher, curriculum materials at different skill levels is the most important resource. Some schools and districts, especially those in which teachers team and/or use a common instructional approach, provide financial support for teachers during the summer months to develop curriculum materials at different skill levels (U14). And, some of the programs do have funds to support resource teachers and computer time to aid in developing materials and assessing student performance (U16).

ADVANTAGES

Teachers feel that subject matter groupings increase the learning of their students by guaranteeing appropriate curriculum materials and more effective instruction.

PROBLEMS

The most common problem among teachers using subject matter grouping concerns the production of materials at different skill levels; this is particularly true among new teachers. Coordination among teachers who team and between a teacher and an aide are also typical problems. However, when ample

planning time is provided (several hours per week), these difficulties seemed minor for the teachers in the regional survey.

PROGRAMS CONTACTED

C3, C5, C8, C11, C15, C18, C19, C20, C21, C23, C25, C26, C29, C30, C32, C33 C34, C35, C36, C41, C42.
N1, N4, N6, N9, N11, N14, N19.
U1, U2, U5, U6, U8, U9, U11, U13, U14, U15, U16, U17, U18, U20, U22, U24, U27, U28, U29, U31, U32, U35, U36.

TEAM TEACHING

DEFINITION

Team teaching is typically referred to as a way for two or more teachers to share and/or exchange students, responsibilities, and space.

GOALS

Teachers usually group together in teams in order to divide up the responsibility for teaching various groups of students. Teachers find that teaming reduces classroom and lesson preparation time. Many believe that instructors who specialize in certain subjects can enrich students' experiences and improve the quality of time spent with them. Some teachers think this arrangement can begin to personalize instruction.

OVERVIEW

Structure. The number of teachers comprising a team varies considerably; the survey indicated a range between two and seven members with the most common number being four. The number of teachers on a team is occasionally influenced by the architecture of the school. For example, in open-space classrooms it is quite common to find three or four teachers who will team in an open area, or pod. At one school the space also includes two self contained classrooms adjacent to these open-space areas so that as many as six teachers can make up a team (C25, C26). Open space, however, is not a prerequisite for teaming since many teams are composed of teachers from separate self-contained classrooms, although these teams are usually smaller than those from open classroom schools.

There are many variations in the way team members share and/or exchange students. Often students are homogeneously grouped by ability with each team member responsible for a different group level. Cross-age combination classes occasionally use a similar arrangement, but students are divided by grade level. Sometimes students are allowed to group themselves since they are given a choice among a variety of activities offered by teachers on the team. No matter who teaches which students, teachers still appear to have some common curriculum development tasks such as developing and maintaining learning centers or designing worksheets. In other cases, groups of students will rotate among the team so that each teacher teaches the same subject (usually a specialty) to all students during the day or over several days. For example, one group of teachers has each team member teach either nutrition, art, science, or music each day to a different group of students (C25, C26). By the end of the week all students have been to each teacher and so they get back together into one large group for music.

In many cases, students begin the school day with their "homeroom" or "homebase" teacher and then shift between other teachers on the team. Occasionally, only a portion of the team is involved in exchanging students, so certain students may remain with their homeroom teachers for longer periods of the day. In general, teaming is done for core subjects such as reading, math, and English; however, teachers have teamed for many other subjects such as

social studies, P.E., drama, science, and creative writing. For all of these subject areas teachers use a basal textbook, materials they have developed on their own, and any additional classroom personnel such as aides, parent volunteers, college interns, and tutors.

Coordination and support. Because team teachers have to organize personnel and materials, there are constant demands on their time for coordination. Teachers report various ways to meet this demand, but most find weekly meetings of one to two hours sufficient. A few teams have elected to meet on a daily basis (e.g., during lunch). In general, all team members have input into their activities, but the team leader or coordinator usually has the final say in scheduling. For example, in one program the coordinator makes weekly decisions in assigning different teachers to various skill groups (U16).

While team teaching has been supported and encouraged by many administrators, some even require teaming in their schools. For instance, some principals set up the teams and select the team leaders (U25) while others allow teams to choose their own leaders (C25). Required teaming appears to occur more often in open-space schools using a pod design than in schools with only self contained classrooms. One principal feels the open arrangement is ideal for team teaching because teachers are in close proximity (U21). In addition, this principal takes the responsibility for training parent volunteers. Some school districts also support teaming by providing inservice training for parent volunteers.

Few respondents mentioned teaming resources although some said that curricular materials are important to their efforts. In particular, one school district uses a district-wide goal-based management system for reading (U14). This program assists team members in organizing their reading instruction and monitoring student progress.

Teaming does not appear to be heavily dependent on the additional funding required of some other grouping arrangements (e.g., pull-out programs), however, some mention was made of how funds were used. For example, one school allots a certain amount of money for its teachers to visit other schools to observe their teaming programs (U16).

ADVANTAGES

The major advantage of team teaching is that classroom and lesson preparation can be greatly reduced for each team member. For example, if students rotate around the entire team, then each team member need only prepare one lesson plan. Larger teams may also exchange students in such a way that each team member is allowed some additional free time during the day. Teachers remarked that teaming allowed them certain unique opportunities, such as teaching those areas in which they feel most comfortable, sharing and discussing ideas with their colleagues, and working with a greater variety of students.

PROBLEMS

The most commonly mentioned problem with team teaching is the amount of time required for coordination and planning among team members, aides, and

parent volunteers. Scheduling different activities can also be a problem, especially when coordinating the exchange of students from cross-age combination classrooms. Since teaming requires interaction among a diverse set of teachers, conflicts can arise. For example, some teachers do not like to be scheduled to teach the low-ability group of students. Sometimes personality conflicts surface. This can be especially true when a principal requires teachers to team or sets up teams without teacher input.

PROGRAMS CONTACTED

C4, C9, C10, C12, C16, C17, C19, C22, C25, C26, C29, C33, C41, C42, C44.
N11, N16, N20.
U2, U3, U4, U5, U6, U7, U8, U9, U10, U11, U12, U14, U16, U17, U18, U19, U20, U21, U24, U25, U26, U27, U28, U29, U30, U31, U32, U35.

CONCERNS AND POSSIBLE STRATEGIES

The issues that teachers and principals seem most concerned with usually involve the elements of time, coordination, and communication. This section then, attempts to deal with four specific problems that respondents have consistently raised throughout the interviews. Our purpose is to provide a variety of strategies that respondents have used successfully in coping with these problems.

CONCERN: The use of aides, tutors, and parent volunteers in relation to training, assignment, and planning time.

A major concern that educators stressed during the survey is the problem of coordination, in particular, finding time for training, assigning appropriate tasks, and planning among themselves and such classroom assistants as paid aides, student tutors, and parent volunteers. Teachers use their staff assistants in a variety of different ways. Some teachers utilize assistants only as clerical help or group monitors, especially student tutors and parent volunteers. Others look upon assistants (especially paid aides) as teachers, and use them for instructional purposes in the classroom. The amount of coordination time needed is directly dependent upon three considerations:

1. Type of assistant used (i.e., paid aide, tutor or volunteer).
2. Assistant's experience and specialty.
3. Time that assistant spends in classroom.

The kinds of training provided for classroom aides varies from one time orientation sessions to ongoing inservice training. When a classroom teacher has one aide who is already experienced, he/she may have that person train the new aide; similarly, teachers often use paid aides to orient and/or coordinate parent volunteers. Sometimes teachers train their aides directly. For example, one teacher at McKinley School in San Leandro, California (C24), uses modeling lessons to train her aides; many other schools report that aides initially spend some time observing classroom teachers before beginning to work with children.

In addition, inservice training may be provided by the school and/or the district. One way to do this is by incorporating ongoing training into the program. For example, aides at Maeser School in Provo, Utah (U16), participate in weekly inservice activities geared to specific topics related to their work in the classroom. In another school, aides attend district workshops and inservice activities on their own time (C45).

When assistants are student tutors, teachers may train the students themselves. At the O'Brien Middle School in Reno, Nevada (N16), eighth grade students are trained by a program leader to help teachers with clerical tasks as well as tutor students in reading. The training session lasts two weeks and the program leader gives teachers a list of what she has taught the tutors. The teachers then assume responsibility for their tutors' activities.

Many schools also have specific training sessions for their parent volunteers. At Midvalley School in Midvale, Utah (U18), volunteers are provided

with a short training program sponsored by the PTA, the school district, and the principal. And at Oakdale School in Sandy, Utah (U21), the principal trains volunteers who are then placed in classrooms by a PTA volunteer coordinator upon the request of teachers. Another teacher who was able to bring volunteers together for one week of training after school reports that this effort has paid off in view of their contributions to the program (N1).

Once aides, tutors, or volunteers are trained, the next issue concerns assigning them tasks appropriate both to their own experience and the teachers' needs. Aide assignments range from clerical or secretarial work, which may be performed outside of the classroom, to instructional activities with individuals or small groups of students. Many educators believe that qualified aides should be used to their full potential and make an effort to get these people into their schools. For example, one school district uses a merit system when selecting classified personnel (C25). Applicants are tested orally and in writing, and are then ranked by combined scores. At Vista del Valle School in Claremont, California (C43), resource centers are staffed by aides who have been hired for their abilities and skills for particular centers (e.g., language arts, home arts, science, audiovisual). Another teacher reports that she designs activities for tutors and paid aides on the basis of their preference and specialty (C24).

After aides and assistants have been trained and their classroom assignments made, teachers are then faced with the added concern of finding time to coordinate their activities and to arrange meeting times with them. Although many instructors mention that other adults in the classroom mean extra work for them, they generally believe this assistance is necessary for the success of their program, or even for its continued existence. Coordinating the activities depends upon the amount of time an aide or assistant spends at school. Teachers report a wide variation in the amount of time aides are present ranging from one or two hours per week to three or four hours every day.

Teachers who have been working with the same aide for some period of time report fewer planning requirements, although minimal coordination is still needed. According to some teachers, planning may occur informally during the day as the teacher and aide work together in the classroom; other teachers use time at breaks, lunch, recess, or before and after school for planning with their aides. Often teachers will use written communications to provide instructions. One teacher who relies heavily on other adults in the classroom writes lesson plans for these people, but adds that this means a very long work week for her (C36). The kindergarten program at Meyers Elementary School in South Lake Tahoe, California (C26), uses job forms for volunteers. Jobs are categorized as either working directly with students or preparing classroom materials. Teachers leave completed forms in one of two appropriately labeled boxes, and volunteers pick them up when they come in. These activities are easy to write up and work efficiently; however, teachers can use this system only for certain types of assignments. Other programs build planning time with aides into their daily schedule (C43).

Occasionally scheduling these meeting times is left to the aide's discretion according to his/her own preference, or even in coordination with the schedule of another school, as is necessary with high school student tutors. In other instances, meeting time is more tightly determined by the teacher's

classroom schedule of activities. In one case, a parent volunteer with no free time during the regular school day helps the teacher by reading papers at home (N1).

CONCERN: Finding time needed to meet with other teachers.

Another problem many teachers discussed was the difficulty of finding time to meet with other teachers when coordinating their programs. Teachers who team and those who share learning centers are the two groups that must routinely meet. Many of the respondents from Utah mentioned having an early dismissal day each week for the purpose of meeting, planning, and coordinating. This time averaged about two hours; however, many teachers added they still needed more time and used before or after school and lunchtimes for planning. Few California and Nevada respondents mentioned having early dismissal days set aside for planning, although at Roosevelt Junior High School in Oakland, California (C37), teachers involved in the Demonstration Reading Program have one day per month set aside to meet and discuss problems, materials, and activities.

Some programs are structured either to allow planning time to occur during actual classtime or to reduce the amount of required planning time. For example, a team teaching unit of four first-grade teachers occasionally pulls all of their first-graders together for a film or special lesson (U9). This allows the remaining three teachers extra time for other activities, including planning. Another team of teachers makes up a master schedule of activities which allows a specialist to prepare materials in advance (U12). This provides some reduction in planning and meeting time since a large bank of materials is kept in the main office which teachers are encouraged to use. In addition to using a yearly master schedule, another team teaching unit also shares a large office which allows informal planning time on a daily, continuous basis (C4).

CONCERN: Informing parents about instructional programs and encouraging their involvement.

Principals and teachers are concerned with letting parents know what their children are doing in school. Besides sending home weekly or monthly newsletters, many teachers use a more personal approach. For example, Oakdale Elementary School in Sandy, Utah (U21), has an evening meeting once a month for parents with children from the same grade level to discuss the program and its activities. Each month parents from a different grade level are invited to attend the meeting. At Ohlone Elementary School in Palo Alto, California (C28), the principal encourages teachers to conduct informal evening meetings with parents to discuss their children and the teacher's program. Because Ohlone has cross-age classes where students may stay with the same teacher for two years, many second-year parents are familiar with the instructional program and can provide useful information to first year parents. Parents are asked to suggest topics for these meetings and in many cases most of the discussions are among the parents, while the teacher acts as a facilitator.

Many teachers encourage parents to come to school to observe what their children are doing. Teachers at Meyers Elementary School in South Lake Tahoe, California (C25, C26), have a program called "Bring a Parent to Lunch." Teachers

at Maesar School in Provo, Utah (U16), encourage parents to come to school for help in understanding computer printouts that show what their child has successfully mastered and what will be covered in the future. Brookwood Elementary School in Sandy, Utah (U4), uses a different approach, since students are encouraged to take their computer printouts home to show their parents what they are doing in school and how well they are mastering the material.

Some teachers and administrators encourage parents to be more actively involved in their child's education outside the classroom. This involvement is another way of passing on information to parents about what is happening in the classroom. In the Jordan School District in Sandy, Utah (U14), schools using GEMS (Goal-based Educational Management System) for reading have a variety of ways to involve parents. Some schools send home GEMS Grams which list a child's problem area(s) and suggest activities around the house that might give students assistance (U14). In other GEMS schools, groups of parents construct the GEMS center materials for the teachers (U12, U36).

In addition, Maesar School (U16) uses a "point card" system whereby students receive daily points for behavior and work habits. This "point card" must be signed by parents each week for students to get credit for their points. Ohlone School (C28) uses a similar system where some teachers have a dittoed progress sheet which is filled in by the child and the teacher. The student takes the report home for parents to add written comments, and then it is returned to the teacher.

Occasionally parents become so involved and committed to programs that they actually influence the way the school is set up or run. One particular school was influenced to use GEMS after receiving many new transfer students who had used GEMS and whose parents wanted it continued (U17). In another instance, when a school district wanted to transfer the principal of their alternative school, parents got together to voice their support to the district, which then allowed the principal to stay (C28). Parents did so out of fear of losing support and encouragement for their active involvement in the school's programs. In another situation parents banded together to ensure the survival of their PALS Program (Pupils Active Learning System) by doing the necessary paperwork to make sure that PALS became designated as a state alternative (C44).

CONCERN: Assigning students and teachers to different instructional groups.

Many teacher teams informally assign students and teachers to different groups at the beginning of the year; however, Maesar School in Provo, Utah (U16), uses a flexible skill-based approach for these assignments. Students in the fourth, fifth, and sixth grades are placed in a staggered reading program where about 60% come early in the morning and 40% stay late in the afternoon. Morning and afternoon assignment is not by ability but is dictated by the bus schedule, availability of aides, and parental requests.

All students in the program are tested at the beginning of the school year to determine which of 54 prioritized skill areas they have mastered. Students who need help in the same skill area are then placed in the same group. Students go to a new skill group each week. Every Friday they are tested over that week's skill material. If they pass, they are placed in a new group on

Monday which covers the next prioritized skill they need to master. If they fail, they still go on to the next appropriate skill, but return to the unmastered skill the following week. These skill groupings are monitored by a computerized system which identifies those students who belong in the same skill group. The computer can also provide a printout listing the skills students have mastered, how many times it has taken them to master each skill, and what skills they still need to cover. Each week information about which students have or have not passed their mastery tests is fed into the computer by the program coordinator.

The program coordinator also oversees the assignment of teachers to the weekly skill groups. Assignments are made based on which teachers are good at teaching which skill groups. Teachers also have some say in their assignments since they can request a certain skill group. Computer printouts of the next week's groupings and assignments are made available on Thursday afternoons when teachers get together to discuss skill groupings and to plan activities for their assigned skill group.

RESPONDENTS

This section identifies two sets of survey respondents. The first set of respondents are those who provided specific information included in the catalog. Their code numbers, names, addresses and phone numbers are provided so readers may contact these people on their own. The second set of respondents are those who provided us with the names of other persons or schools that were subsequently contacted.

Respondents Providing Specific Information

CALIFORNIA

C1 Patricia Kelly
Alisal Elementary School
1454 Santa Rita Road
Pleasanton, CA 94566
(415) 846-9595

C2 Mary Anne Kojan
Berkeley Alternative School (P-9)
2425 Stuart Street
Berkeley, CA 94705
(415) 644-6225

C3 Shelley Man
Buford Elementary School
10319 Firmona Avenue
Lennox, CA 90304
(213) 673-3490

C4 Charles Hedgepeth
Bullard High School
5445 N. Palm
Fresno, CA 93604
(209) 439-5261

C5 Judy Meyer
Cleveland Elementary School
2050 Reynolds Street
San Leandro, CA 94577
(415) 577-3062

C6 Pat Robertson
Cleveland Elementary School
2050 Reynolds Street
San Leandro, CA 94577
(415) 577-3062

C7 Judy Silver
Colonial Acres Elementary School
17115 Meekland Avenue
Hayward, CA 94541
(415) 276-2481

C8 Sueva Baldo
Donlon Elementary School
7416 Brighton Drive
Dublin, CA 94566
(415) 829-1780

C9 Dorothy Dow
Dublin High School
8151 Village Parkway
Dublin, CA 94560
(415) 828-6410

C10 Ann Reid
Dublin High School
8151 Village Parkway
Dublin, CA 94560
(415) 828-6410

C11 Sue Ross
Dublin High School
8151 Village Parkway
Dublin, CA 94560
(415) 828-6410

C12 Don Seever
Dublin High School
8151 Village Parkway
Dublin, CA 94560
(415) 828-6410

C13 Dottie Bertz
Garfield Elementary School
13050 Aurora Drive
San Leandro, CA 94577
(415) 577-3048

C14 Bernice Nossoff
Hacienda Elementary School
11454 Winchell Street
Whittier, CA 90606
(213) 695-3717

C15 Susan Morrison
Huron Elementary School
P. O. Box 37
Huron, CA 93234
(209) 945-2256

C16 Renate Brewster
Jordan Middle School
750 N. California Avenue
Palo Alto, CA 94303
(415) 855-8274/8283

C17 Liz Lillard
Jordan Middle School
750 N. California Avenue
Palo Alto, CA 94303
(415) 855-8274

C18 Courtney Bryant
Los Ninos Elementary School
950 Amarillo
Palo Alto, CA 94303
(415) 855-8370

C19 Marge Collins
Los Ninos Elementary School
950 Amarillo
Palo Alto, CA 94303
(415) 855-8370

C20 Debbie Mytels
Los Ninos Elementary School
950 Amarillo
Palo Alto, CA 94303
(415) 855-8370

C21 Carolyn Lawrence
Madison Elementary School
14751 Juniper Street
San Leandro, CA 94579
(415) 577-3060

C22 Michael Crill
Magnet School Project
Corner of Tulare and M Streets
Fresno, CA 93721
(209) 441-3578

C23 Muriel King
Mayfair Elementary School
2000 Kammerer
San Jose, CA 95116
(408) 258-5078

C24 Maryl Saylor
McKinley Elementary School
2150 E. 14th Street
San Leandro, CA 94577
(415) 577-3066

C25 Walter Currier
Meyers Elementary School
San Bernardino & Apache Streets
P. O. Box 14426
South Lake Tahoe, CA 95702
(916) 577-1881

C26 Shirley Downing
Meyers Elementary School
San Bernardino & Apache Streets
P. O. Box 14426
South Lake Tahoe, CA 95702
(916) 577-1881

C27 George Vojtko
Mildred L. Hale Junior High School
5331 Mount Alifan Drive
San Diego, CA 92111
(714) 277-8131

C28 Jim Mathiott
Ohlone Elementary School
445 E. Charleston
Palo Alto, CA 94306
(415) 855-8408

C29 Linda Murphy
Pleasanton Elementary School
4750 First Street
Pleasanton, CA 94566
(415) 846-2845

C30 Jerry Shelly
Pleasanton Elementary School
4750 First Street
Pleasanton, CA 94566
(415) 846-2845

C31 Faye Harbison
Project Catch-Up
1601 - 16th Street
Newport Beach, CA 92663
(714) 760-3300

C32 Greta Nagel
Rio Vista Elementary School
310 North Rio Vista Street
Anaheim, CA 92806
(714) 630-7681

C33 Mary Beth Barloga
Roosevelt Elementary School
951 Dowling Boulevard
San Leandro, CA 94577
(415) 577-3051

C34 Jon Hassell
Roosevelt Elementary School
951 Dowling Boulevard
San Leandro, CA 94577
(415) 577-3051

C35 Peggy Hulse
Roosevelt Elementary School
951 Dowling Boulevard
San Leandro, CA 94577
(415) 577-3051

C36 Beverly Stoermer
Roosevelt Elementary School
951 Dowling Boulevard
San Leandro, CA 94577
(415) 577-3051

C37 Ann Halpern
Roosevelt Junior High School
Demonstration Reading Program
1926 - 19th Avenue
Oakland, CA 94606
(415) 261-8516

C38 Ruth Carleton
Sequoyah Elementary School
3450 Louis Road
Palo Alto, CA 94303
(415) 855-8385

C39 June Schiller
Sequoyah Elementary School
3450 Louis Road
Palo Alto, CA 94303
(415) 855-8385

C40 Barbara Clark
Sierra Junior High School
Demonstration Reading Program
3017 Center Street
Bakersfield, CA 93306
(805) 323-4838

C41 Johnnie Borris
Vintage Hills Elementary School
1125 Concord Street
Pleasanton, CA 94566
(415) 462-4100

C42 Donna Inglesby
Vintage Hills Elementary School
1125 Concord Street
Pleasanton, CA 94566
(415) 462-4100

C43 Ginny Jacobson
Vista del Valle Elementary School
550 Visa Drive
Claremont, CA 91711
(714) 624-9041 ext. 273

C44 Joanne Nix, Linda West
Walnut Grove Elementary School
5199 Black Avenue
Pleasanton, CA 94566
(415) 846-4448

C45 Pat Campe
Washington Elementary School
250 Dutton Avenue
San Leandro, CA 94577
(415) 577-3053

NEVADA

N1 Janet Bohart
Bordewich Elementary School
West 2nd & Thompson Streets
Carson City, NV 89701
(702) 885-6322

N2 Barbara Jepsen
Bordewich Elementary School
West 2nd & Thompson Streets
Carson City, NV 89701
(702) 885-6322

N3 Jack Carver
Carson Junior High School
West King Street
Carson City, NV 89701
(702) 885-6400

N4 Judy Elges
Carson High School
1551 Hwy. 50 E.
Carson City, NV 89701
(702) 885-6500

N5 Mary Urrutia
Clayton Middle School
1295 Wyoming Avenue
Reno, NV 89520
(702) 747-3718

N6 Jwood Raw, Mary Jo Weaver
Dilworth Middle School
255 Prater Way
Sparks, NV 89431
(702) 358-8320

N7 Bonnie Carter
E. C. Best Junior High School
750 E. Williams
Fallon, NV 89406
(702) 423-3159

N8 Connie Wilson
E. C. Best Junior High School
750 E. Williams
Fallon, NV 89406
(702) 423-3159

N9 Charles Robinson
Fernley Elementary School
450 Hardy Lane
Fernley, NV 89408
(702) 575-2737

N10 Jim Parry
Freemont Elementary School
700 E. 5th Street
Carson City, NV 89701
(702) 885-6341

N11 Judy Pivarnik
Freemont Elementary School
700 E. 5th Street
Carson City, NV 89701
(702) 885-6341

N12 Donna Swanson
Freemont Elementary School
700 E. 5th Street
Carson City, NV 89701
(702) 885-6341

N13 Carole Jenny
Gleason Elementary School
604 Musser
Carson City, NV 89701
(702) 885-6371

N14 Freda Ford
Mildred Bray Elementary School
710 W. 4th
Carson City, NV 89701
(702) 885-6391

N15 Pauline Thies
Mildred Bray Elementary School
710 W. 4th
Carson City, NV 89701
(702) 885-6391

N16 Francey Hutchings
O'Brien Middle School
10500 Stead Boulevard
Reno, NV 89520
(702) 972-0233

N17 Bob Benson
Reno High School
395 Booth Street
Reno, NV 89520
(702) 322-6953

N18 Pam Phillips
Reno High School
395 Booth Street
Reno, NV 89520
(702) 322-6953 ext. 69

N19 Ida Gulino
Seeliger Elementary School
2800 S. Saliman
Carson City, NV 89701
(702) 885-6363

N20 Roberta Lawson, Trudy Nunn
Sparks Middle School
2275 - 18th Street
Sparks, NV 89431
(702) 358-6344

N21 Judy Thompson
Winnemucca Junior High School
E. Fourth and Reinhart
P. O. Box 868
Winnemucca, NV 89445
(702) 623-3671

UTAH

U1 Rique Ochoa
Alta High School
11055 S. 1000 E.
Sandy, UT 84070
(801) 571-7745

U2 Sandy Lizak
Brookwood Elementary School
8640 S. Snowbird Drive
Sandy, UT 84070
(801) 943-1973

U3 Mary Pusey
Brookwood Elementary School
8640 S. Snowbird Drive
Sandy, UT 84070
(801) 943-1973

U4 Keith Wilson
Brookwood Elementary School
8640 S. Snowbird Drive
Sandy, UT 84070
(801) 943-1973

U5 Linda Ashton
Butler Middle School
7530 S. 2700 East
Salt Lake City, UT 84121
(801) 943-3151

U6 V. J. Rupp
Central Elementary School
55 N. 1st W.
Tooele, UT 84074
(801) 882-3573

U7 Lincoln Card
Edgemont Elementary School
3700 N. 500 E.
Provo, UT 84601
(801) 225-3160

U8 Debbie Matthews
Edgemont Elementary School
3700 N. 500 E.
Provo, UT 84601
(801) 225-3160

U9 Alice Jane McKinney
Edgemont Elementary School
3700 N. 500 E.
Provo, UT 84601
(801) 225-3160

U10 George Shell
Edgemont Elementary School
1085 E. 9800 S.
Sandy, UT 84070
(801) 571-4382

U11 Kathryn Jensen
Granite Elementary School
9760 S. 3100 E.
Sandy, UT 84070
(801) 942-1960

U12 Sherrie Wasden
Indian Hills Middle School
1180 E. Sanders Road
Sandy, UT 84070
(801) 572-1444

U13 La Mar Beckstead
Jordan School District
9361 S. 400 E.
Sandy, UT 84070
(801) 566-1521 ext. 157

U14 Beverly Lloyd
Jordan School District
9361 S. 400 E.
Sandy, UT 84070
(801) 566-1521

U15 Dave Stevens
Kearns High School
5525 South 4800 West
Kearns, UT 84118
(801) 969-1481

U16 Monroe Gallier, Ted Kelly
Maesar Elementary School
150 S. 500 E.
Provo, UT 84601
(801) 373-7650

U17 Dennis Lyons
Midvalley Elementary School
217 E. 7800 S.
Midvale, UT 84047
(801) 255-7197

U18 Ardis Sollier
Midvalley Elementary School
217 E. 7800 S.
Midvale, UT 84047
(801) 255-7197

U19 Sherman Johansen
Monroe Elementary School
4450 W. 3100 S.
Salt Lake City, UT 84120
(801) 969-9849

U20 Janeen Butterfield
Oakdale Elementary School
1900 E. Creek Road
Sandy, UT 84070
(801) 942-1957

U21 Owen Harrison
Oakdale Elementary School
1900 E. Creek Road
Sandy, UT 84070
(801) 942-1957

U22 Sam Saxon
Petersen Elementary School
Sunnyside, UT 84539
(801) 888-4474

U23 Sheila Tranter
Scera Park Elementary School
450 S. 400 E.
Orem, UT 84057
(801) 225-4917

U24 Rene Brooks
Silver Mesa Elementary School
8920 S. 1700 E.
Sandy, UT 84070
(801) 566-3953

U25 Alan Nelson
Silver Mesa Elementary School
8920 S. 1700 E.
Sandy, UT 84070
(801) 566-3953

U26 Eloise Kirkman
South Jordan Elementary School
South Jordan, UT 84070
(801) 254-3981

U27 LuAnne Fredrickson
Southland Elementary School
12675 South 2700 W.
Riverton, UT 84065
(801) 254-0701

U28 Sylvia Griffiths
Sprucewood Elementary School
12025 S. 10th E.
Sandy, UT 84070
(801) 571-3876

U29 Edna Ehleringer
Sunrise Elementary School
1520 E. 11265 S.
Sandy, UT 84070
(801) 571-4521

U30 Don Lennberg
Sunrise Elementary School
1520 E. 11265 S.
Sandy, UT 84070
(801) 571-4521

U31 Dixie Mitchell
Sunrise Elementary School
1520 E. 11265 S.
Sandy, UT 84070
(801) 571-4521

U32 Gaylan Stewart
Sunrise Elementary School
1520 E. 11265 S.
Sandy, UT 84070
(801) 571-4521

U33 Ronald Lamb
Washington Elementary School
420 N. 2nd West
Salt Lake City, UT 84010
(801) 359-3737

U34 Cheryl Wewee
Washington Elementary School
420 N. 2nd West
Salt Lake City, UT 84010
(801) 359-3737

U35 Joani Richardson
Willow Canyon Elementary School
9650 S. 1700 E.
Sandy, UT 84070
(801) 571-6770

U36 Gilbert Stevenson
Willow Canyon Elementary School
9650 S. 1700 E.
Sandy, UT 84070
(801) 571-6770

Respondents Providing Other Contacts

Bill Abrams
Pat Allison
William Baker
R. Gene Ball
Nancy Banker
Keith Beerg
Ed Bispo
Phil Buchanan
Keith Cakebread
Peggie Campeau
Carolyn Cates
Tom Chenoweth
Earl Cox
Dan Duke
Robert Halliday
Glennis Hill
Tom Himmelberg
Rita Hodgkins
Joan Hopkins
Pearl Howell
Thomas Husted
Jo-Ann Intili
Lynn Jenks
Thaxton King
JoAnn Kliejmas
Barbara Klingborg
Marshall Leavey
Ken Lindsay
Ginna Lurton
Sue McKibbon
Nancy Moore
Roger Phillips
Beatyanne Rasmussen
Lorraine Ritchie
Alex Salazar
Jim Scott
Lee Shulman
Lyle Siverson
Lonnie Spencer
Bob Stahl
Herb Steffans
Robert Swain
Neil Sweeney
Alyce Taylor
Bill Tikunoff
Carli Willis